ABSTRACT

In a semiconductor device of a structure comprising a thin semiconductor element bonded to a reinforcing plate with a bonding layer of a predetermined thickness, resin binder used for forming the bonding layer contains fillers including first filler, which has a diameter generally equal to a target thickness of the bonding layer to be adjusted to a value within a range of proper thickness (from 25µm to 200µm). This can maintain the bonding layer within the range of proper thickness when the semiconductor element is bonded to the plate, and ensure on-board mounting reliability of the semiconductor device.

5